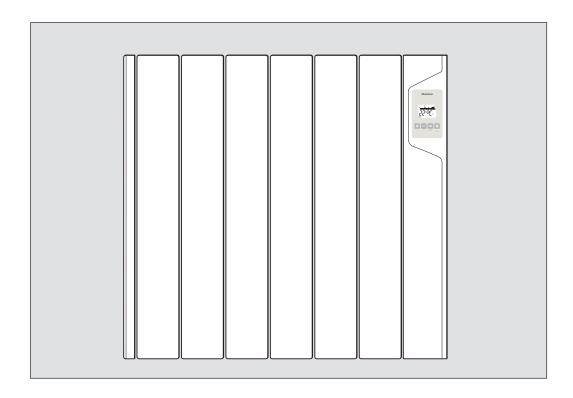
# ducasa

# **AVANT-DGi**

Thermal Electric Radiator

Operating and Installation Instructions

(Read these instructions carefully and retain for future reference)



### Models:

AVANT-DGi 350 AVANT-DGi 500 AVANT-DGi 800 AVANT-DGi 1000 AVANT-DGi 1300 AVANT-DGi 1500 AVANT-DGi 1800



### NOTE:

A qualified electrician must carry out the electrical installation of this radiator. The Electrical installation must comply with the current UK regulations. Any claim on the warranty could be invalid if these requirements have not been met.

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### **GENERAL INFORMATION**

The Avant DGi has a special cast aluminium body specifically designed to assure the maximum rate of heat radiation; the air circulation channels provide a very efficient convection effect.

A unique manufacturing process provides bubble free filling so that the fluid delivers warmth from the heating element in a totally uniform way, ensuring that the entire surface of radiator provides comfortable heat.

A monotube heating element ensures maximum heat output.

Designed and fabricated in accordance with EN 60335-1, EN 60335-2 and EN 55014 (regulations

for domestic appliances)

Standard colour White (RAL 9016)

Class I

Wall mounted (by quick fixing system)

Capillary over temperature safety limiter

On-off main switch (illuminated)

Overheat protection

Key-pad locking (anti-tamper)

NTC electronic sensor

Fitted with mains power cable approximately 1450mm long (without a plug)

#### **Technical Data**

MODEL	Number Of Fins	Power Rating (W)	Size (mm)	Net Weight (Kg.)	Fuse Rating
Avant-DGi 350	3	350	340 x 580 x 100	6.9	5 Amp.
Avant-DGi 500	4	500	420 x 580 x 100	8	5 Amp.
Avant-DGi 800	6	800	580 x 580 x 100	12	5 Amp.
Avant-DGi 1000	8	1000	740 x 580 x 100	16	10 Amp.
Avant-DGi 1300	10	1300	900 x 580 x 100	20	10 Amp.
Avant-DGi 1500	12	1500	1060 x 580 x 100	24	10 Amp.
Avant-DGi 1800	12	1800	1060 x 580 x 100	24	10 Amp.

### **Important Information**

See Section "Installation Instructions – Location of Heater" for important safety notes regarding the siting of the appliance.

Due to the surfaces of the heater becoming hot, it must not be positioned directly against or below flammable surfaces.

Do not dry clothes or towels on the heater nor leave fabrics, magazines, spray cans, volatile substances or similar objects within 250mm of the heater.

In case of breakdown or damage turn off the appliance at the main On/Off switch and notify the supplier.

If the electricity cable gets damaged it must only be replaced by a technician appointed by the supplier. This will avoid possible risks and ensure that special tools are available if needed.

This appliance is not intended to be used by persons (incl. children) with limited physical, sensory or mental capabilities, or who lack experience, except for those under supervision or who have received instruction in the use of the appliance from a person responsible for their security.

Children must be supervised in order to ensure that they do not play with the appliance.

WARNING: In order to prevent overheating, do not cover this appliance. There has to be free movement of air around all surfaces of the appliance.



This symbol "DO NOT COVER", is placed on the heater as a reminder to the user.

### **INSTALLATION INSTRUCTIONS**

#### **Electrical Connection**

A qualified electrician must carry out the electrical installation of this radiator. The electrical installation must comply with the current UK regulations. Any claim on the warranty could be invalid if these requirements have not been met.

The radiator requires a 230/240V 50/60Hz power supply.

Connecting wires:

Brown: Live Blue: Neutral

Yellow-Green: Earth

The connecting wires must be of the appropriate section, in regards to the length of cable, type of cable and power rating of the apparatus.

The apparatus must be connected into a **fused** connecting box fitted with an appropriate sized fuse for the radiator – see Technical Data on Page 3.

We recommend that the connecting box is positioned 10cm to the right of the apparatus and at 15cm above the floor. According to regulations, the apparatus must be connected to the power supply by means of an all-pole circuit breaker with a contact gap of at least 3mm or by a thermal-magnetic circuit breaker.

#### Location

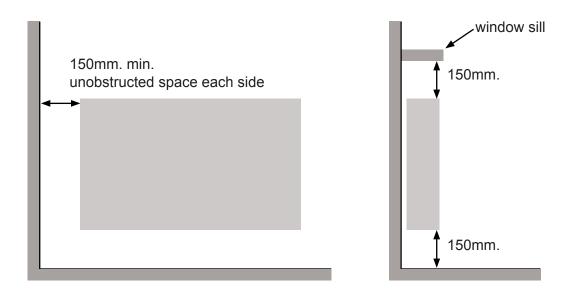
The ideal place to site the Ducasa radiator is as close as possible to coolest wall in the room but it is not recommended to site the radiator on un-insulated exterior walls, in this case, the part of the wall behind the radiator should be insulated.

In bathrooms, the radiators must not be sited inside the protected areas. The control unit switches must not be reachable, directly or indirectly, by a person in the bath / shower or using the wash basin.

The radiator, under no circumstances, should be installed below an electric power point.

Choose the location of the radiator in respect of the minimum distances that are indicated in Figure A.

Fig. A

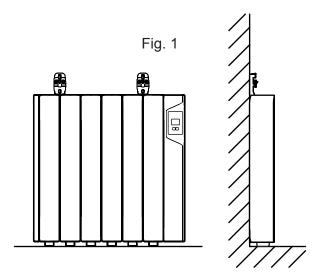


Note: If the window sill protrudes less than 20mm the gap above the heater can be disregarded.



### Mounting The Radiator

Place the radiator on the floor, as shown in Figure 1. For radiators with 4, 6, 8 or 10 elements position the supports supplied with the radiator as shown in Figure 1. For radiators with 12 elements the supports should be positioned between the second and third elements from each end.



Place the supports between the elements as shown in Figure 2a, mark points on the walls through the fixing holes as shown in Figure 2b. This determines the spacing of the supports. Fix the supports to the wall with plugs and screws. Be sure that the supports are mounted in the correct position.

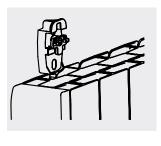


Fig. 2a

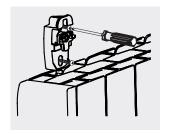
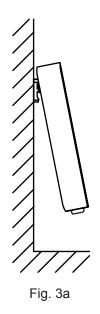


Fig. 2b

Lift the radiator and hang it on the supports, as Figures 3a and 3b.



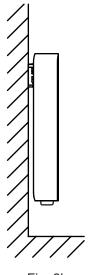
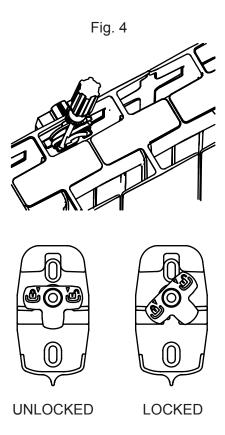


Fig. 3b

As soon as the radiator is hanging on the supports press on the locking plate until a click is heard. See Figure 4. The radiator is now installed.



### **CONTROL OPTIONS**

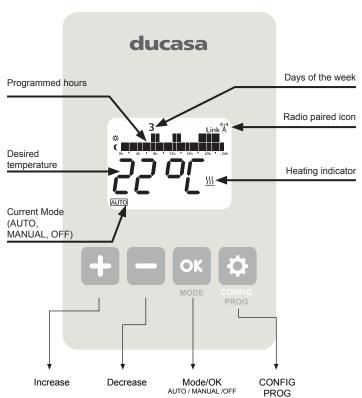
The Avant DGi is designed to be used in conjunction with the **smart command** system and APP, providing total control of your radiators from anywhere in the world via the internet. The APP is available for both Android and IOS devices and offers the ultimate in control and energy monitoring.

It is also possible to programme each radiator individually without the APP by using the inbuilt buttons and LCD screen. This may be convenient for single radiators however we recommend the **smart command** to control multiple radiators.

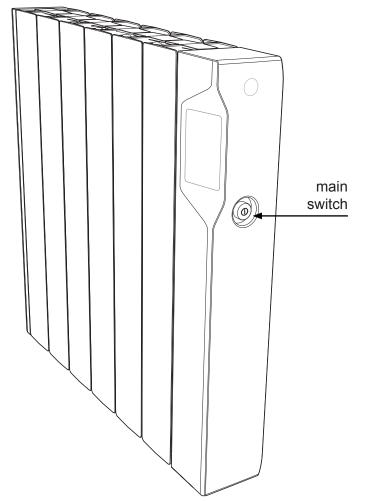
Finally the radiators can be used in manual mode which bypasses any programming and provides simple On/Off operation.

### **OPERATING INSTRUCTIONS**

The control is based on four buttons and an LCD display.



**Ducasa DGi Radiator Controls** 



#### Switching ON (Master):

Once the radiator has been mounted on the wall and correctly connected to the main electricity power supply, press the main On-Off switch on the right hand side of the radiator.

After around 3 seconds the screen will show various information and the radiator is ready to work.

### Switching OFF (Master):

To switch off the radiator press the main On-Off switch on the right hand side of the radiator. The LCD screen will be blank and the radiator will lose connection with the **smart** command Gateway.

### Stand-by function:

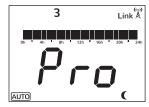
Press the Mode/OK button until the OFF symbol is present as shown in the following screen.



When the radiator is in Stand-by Mode it will retain programmes and continue to communicate with the **smart command** Gateway but will not heat.

To switch the radiator On again, press the MODE button to choose programme mode AUTO or manual mode — you will see the following screens:





# Manual Programming

To assist with programming the LCD screen is backlit and will stay illuminated for approximately 10 seconds after the last button is pressed.

When the radiator is operational and the room temperature is lower than the set temperature the heating symbol  $\frac{\text{MS}}{\text{MS}}$  will be shown indicating that the radiator is producing heat. When the room temperature equals or is above the set temperature the heating symbol will not be present indicating the radiator is not producing heat.

The following screens show **OFF**, **AUTO** and **MANUAL** modes. To chose different modes press **MODE/OK** button.



When the radiator is in **AUTO** mode the temperature can be changed by pressing the +/-buttons. This change will remain active until the next programme change or until midnight when the temperature will revert to the preset value.

Use the +/- keys to change the temperature when the radiator is in **MANUAL** mode.

### **Adjust Programmed Temperatures**

Adjusting temperature in the following way will only effect the temperatures used for programmed modes.

To change these set up temperatures press the **CONFIG** button and the following screen appears:



When the temperature setup icon **g**← starts flashing, press OK to scroll through each mode.



Press the +/- button to change the temperature of each mode then press **OK** to confirm and go to the next MODE and exit to the temperature setting screen by pressing CONFIG.

# Setting Programme and Clock

To start programming press and hold **CONFIG/PROG** button for 3 seconds and the following screen will appear:



Programming starts on Monday at 00:00 and is set by choosing the required Mode for each hour of the week. Use the **OK** button to choose between Comfort \$\display\$, Economy \( \bigcolor \text{ or Frost } \display\$ Protection modes. On the screen programme hours will show two blocks for Comfort, one block for Economy and no blocks for frost protection). After choosing the mode press the +/- buttons to select the next hour to be programmed. When a full day has been programmed the screen moves to the next day.

Once each day of the week has been programmed the clock must be set.

Press the **CONFIG** button to exit from programming screen and enter the time setting screen.

To select the day of the week (1=Mon, 7=Sun) press +/- buttons and confirm with the **OK** button. Next select the hour, confirm with **OK** and then select the minutes and confirm pressing **OK** once more.



If a radiator is paired with a **smart command** Gateway, time setting is not required as it recognises the system's time automatically.

# **Programming with Smart Commmand**

To programme your Avant DGi with a **smart command** Gateway you must pair the radiator to the Gateway. First you must activate the pairing/discovery mode in the Gateway. Details of this can be found in the **smart command** instruction manual.

Once this is done press the CONFIG button on the radiator and use the + or - key until the RF icon flashes. Press OK and 'Link' together with an antenna icon will appear in the top right of the screen.



Another way to pair the radiator is to press the **OK** button for 3 seconds while the radiator is in one of the main modes (OFF, AUTO, MANUAL).

Your Avant DGi radiator is now ready to accept programme instructions from the Gateway (you will need to complete **smart command** web activation).

If the radiator has been linked to the Gateway and for some reason communication is lost, the Link icon disappears and the antenna starts flashing.

# Keypad Locking (Anti-Tamper)

The keypad can be locked to prevent any unauthorised person (children, people in public places, nurseries, offices, hotels etc.) altering the settings of the radiator. To lock the keypad depress and hold the + and – buttons at the same time for 3 seconds until "bloc" appears on the screen. Any button presses will be ignored and "bloc" will be displayed on the screen.

To unlock keyboard, once again press and hold + and - for 3 seconds until the word 'bloc' disappears.

When the keypad is locked the radiator will still receive communications from the **smart** command Gateway.

### **Advanced Settings**

To enter the advanced settings mode, press **CONFIG** while the radiator is in one of the main modes (OFF, AUTO, MANUAL). The following window will appear:



Now press the **CONFIG** button for 5 seconds and C1 appears on the screen.

To select one of the three advanced settings (C1 to C3) use the +/- keys and choose the required mode by pressing OK. The advanced settings are:

- 1. C1-> Choose °F or °C
- 2. C2-> Choose type of control
- 3. C3-> Temperature Compensation

### **Degrees Fahrenheit or Celsius (C1)**

Select °C or °F with the +/- keys and confirm with OK button .



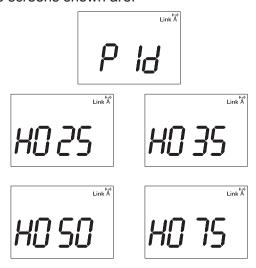


# Type of Control (C2)

You access the setting mode control, showing the type of control currently used. There are 4 types of control PID, hysteresis of 0.25°C, hysteresis of 0.35°C, hysteresis of 0.50°C and hysteresis of 0.75°C.

To change type of control press +/-. Confirm with **OK**.

The screens shown are:



### Temperature Compensation (C3)

In this mode the display will alternate between the temperature compensation (offset) and the measured temperature with offset applied. Alter the offset with the +/- buttons and confirm with OK.

Temperature compensation can be adjusted up to +/- 3°C





### **Radiator Reset**

Resetting the radiator will return all settings to the factory defaults and will also delete any 'pairing' with a **smart command** Gateway. To activate the RESET feature press the **OK** button and the **CONFIG** button for 10 seconds. The following screen will appear:



To confirm the reset, press **OK** again, to cancel the **RESET** press any other key.

# **Default Values**

Working mode: OFF
Comfort Temp: 19°C
Economy Temp: 17°C

Frost Protection Temp : 5°C
 Manual Mode Temp: 19°C

Temperature Compensation: 0°C

No RF paired network
Temperature units °C
Control type: PID

Default Programme: All Economy

ducasa

### **MAINTENANCE AND CARE**

Ducasa radiators require very little maintenance.

The surfaces of the radiator must not be cleaned with an abrasive product or those containing granular substances. We recommend regular cleaning with PH neutral products.

In order to clean the radiator, it is recommended that the electric power is switched off.

#### Guarantee

Your appliance is guaranteed for 10 years against leakage and 2 years on electric and electronic components from the date of purchase – during this period we will repair or exchange, at our discretion, any faulty or defective parts providing the appliance has been used in accordance with the operating & installation instructions and has not been misused or mistreated in any way.

Any unauthorised repair or attempted repair will invalidate the guarantee. You may be asked to return the product to our workshop for inspection to establish whether the fault is covered under the guarantee. The guarantee is valid in the UK only.

This guarantee is additional to your statutory rights.

In the unlikely event of a problem with your appliance please contact your supplier.

### **Correct Disposal of This Product**

(Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)



This marking shown on the product or its literature, indicates that it should not be disposed of with other household wastes at the end of its working life.

To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.



UK Distributor of Ducasa Products:

Heattend Products Ltd

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Email: enquiries@heattend.co.uk